

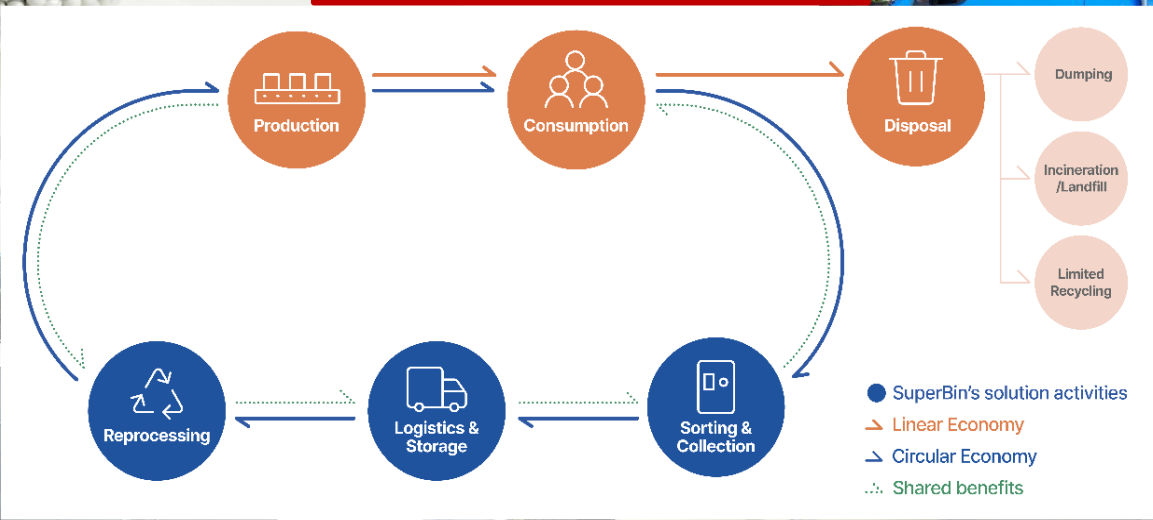


Building Plastic Circular Economy Solutions in Developing Countries

- Adapting Korea's Digital Innovation

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The PET Waste Landscape in Metro Manila

48%

Current Recycling Rate

(only 38,000 tons collected for recycling)

Significant Recovery Gap

Rapid urbanization and surging population outpace waste infrastructure, causing severe environmental crises.

Out of 70,000 tons of PET generated annually in Metro Manila, more than half is lost to landfills or the environment. This represents a massive untapped economic opportunity for high-quality recycled materials.

70k+

Tons
Generated

70%

Informal waste pickers
contribution

Key Challenges : findings from Pre-FS

Why a "Machine-focused" Model Faces Barriers

- ① **Traffic Congestion:** Extreme urban density makes frequent logistics for unmanned machines (Nephron) costly and inefficient.
- ② **Informal Sector:** 70–80% of collection is driven by informal pickers; their inclusion is mandatory for social and operational success.
- ③ **Quality Vacuum:** Inconsistent sorting at the source leads to

Pre-FS in Metro Manila reveals common Southeast Asian challenges, making Korea's machine-focused model difficult to scale directly.



Strategy Pivot: Digital Face-to-Face

Digital Recycling Store

Pivoting from Korea's model to digitalized face-to-face collection points respect local informal waste pickers

- ① **Monetary Incentives:** cash-for-waste transactions
- ② **Social Inclusion:** Integrating informal waste pickers into a formal data-driven supply chain
- ③ **Trust:** Transparent weighing and real-time point tracking



In partnership with Local governments, Superbin operates over 100 digital recycling stores in Korea.

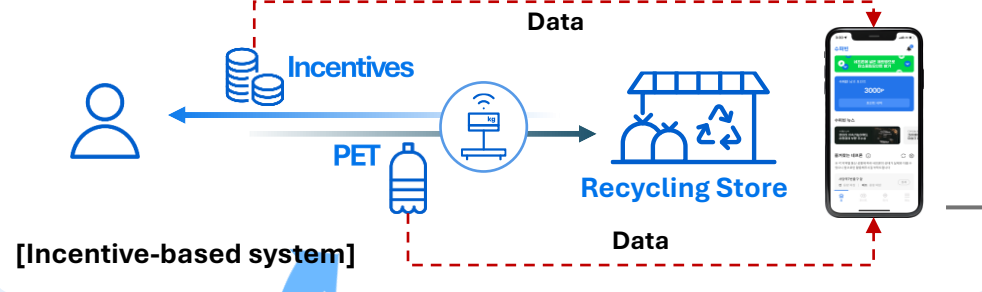
Roadmap to Delivery : phased expansion

Big Collector of Transparent PETs

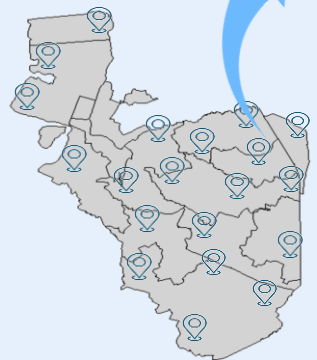
Collection Based on Monetary Incentives

Digitalized Face-to-Face Collection System

Recyclable-for-cash transaction mechanism



[Incentive-based system]



PET collection via LGU-operated pick-up points

: Pick-up Point

Logistics with Efficiency



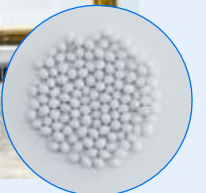
PET logistics without contamination



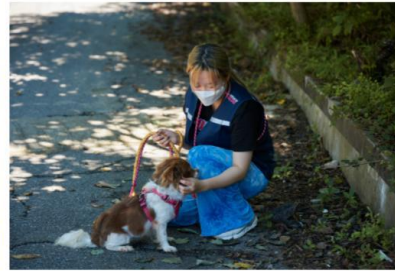
r-PET Bale

High-Quality r-PET Producer

r-PET flake production



r-PET pellet production



Thank you

